



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,670	11/29/2001	Sassan Tarahomi	7104-83736	5767

7590

09/03/2003

Welsh & Katz, Ltd.  
Jeffrey W. Salmon  
22nd Floor  
120 South Riverside Plaza  
Chicago, IL 60606

EXAMINER

PEDDER, DENNIS H

ART UNIT

PAPER NUMBER

3612

DATE MAILED: 09/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/997,670

Applicant(s)

TARAHOMI ET AL.

Examiner

Dennis H. Pedder

Art Unit

3612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-3, 5-10, 13, 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ver Deutsche Metallwerke AG in view of Carbone et al. and Kuczynski et al. .

Ver Deutsche Metallwerke AG shows elongated beam 5, foam portion 3, fascia surrounding same being common knowledge in the art, a recess in the foam portion, and a metallic cylindrical cell matrix of hexagonal shape disposed in and supported by the recess and configured to absorb energy. The recess abuts a portion of the beam. The matrix is removably secured within the recess after formation of the foam portion by destructive cutting of the foam to separate same from the beam 5 and removing the matrix from the resulting open end of the exposed recess.

Carbone et al. teaches a fascia 17 encapsulating a cylindrical cell matrix made of plastic or metal. Carbone et al. also teaches a hexagonal shape, but mentions also that the shape may be "any other suitable geometrical shape". It would have been obvious to one of ordinary skill in the art to provide in Ver Deutsche Metallwerke AG a fascia and plastic material as taught by Carbone et al. as a known alternative in the art. At the time of the invention, it was known in the art, for example, to utilize plastic as a weight savings.

Kuczynski et al. teaches that a cellular member within a foam substrate may be configured as a circular cylinder. As a result of this teaching, predating the disclosure of applicant, It would have been obvious to one of ordinary skill to provide in the references above a circular shape to the cylindrical member as taught by Kuczynski et al. for its known absorption characteristics.

Art Unit: 3612

As to claim 3, adhesive bonding of an insert within a foam material is not only common knowledge in the art, but an obvious expedient to secure.

As to claims 5-6, Ver Deutsche Metallwerke AG shows approximately 56 percent. The exact ratio of foam and recess is deemed to be a determination of a technician evaluated for each vehicle and weight to meet government standards.

As to claim 7, Ver Deutsche Metallwerke AG shows the matrix flush with the beam and foam interface.

As to claim 8, applicant admits the use of this material in the prior art, hence it would have been obvious to one of ordinary skill in the art to provide this material in the current bumper to meet low speed impacts.

As to claim 9, the determination of density is also one of a technician.

As to claim 13, formation of multiple recesses is merely an obvious duplication of parts to save weight in regions under low stress during FMVSS testing.

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ver Deutsche Metallwerke AG in view of Carbone et al. and Kuczynski et al. as applied to claim 1 above and further in view of Glance.

It would have been obvious to one of ordinary skill in the art to provide in Ver Deutsche Metallwerke AG as modified by Carbone et al. a sandwiched absorber as taught by Glance sandwiched by panels 64.

Art Unit: 3612

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ver Deutsche Metallwerke AG in view of Carbone et al. and Kuczynski et al. and further in view of Hale.

It would have been obvious to one of ordinary skill in the art to provide in Ver Deutsche Metallwerke AG as modified by Carbone et al. a metal replacement of polyester sheet molded compound as taught by Hale as an equivalent in the art.

***Response to Arguments***

4. Applicant's arguments of July 21, 2003 are not persuasive.

Please see the detailed rejection above. Unless specific differences between the interface of the foam substrate and the bumper beam are claimed, it does not appear possible to offer patent protection.

It is incomprehensible that applicant could conceive of the matrix of Ver Deutsche not being supported by the foam portion as it rests within same. Further, the plate 7 is not connected to the beam 5, in spite of applicant's arguments.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3612

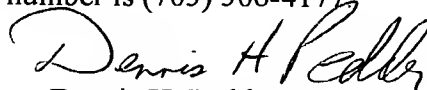
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Vismara shows a similar matrix and bumper.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis H. Pedder whose telephone number is (703) 308-2178. The examiner can normally be reached on 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn D. Dayoan can be reached on (703) 308-3102. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 306-4195 for regular communications and (703) 305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-4177.

  
Dennis H. Pedder  
Primary Examiner  
Art Unit 3612

8/26/03

DHP  
August 26, 2003